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Section IV:
AMENDMENT UNDER 37 CFR §1.121
REMARKS

Summary of Telephone Interview

On May 20, 2003, examiner Rimell and applicant's agent Robert H. Frantz, held a telephone interview at the applicant's agents request in order to discuss proposed amendments to the claims and definitions of Object Request Broker (ORB), Interface Definition Language (IDL), and Interface Repositories (IR). A follow-up interview was held on May 22, 2003, after examiner had considered the proposed amendment and definitions.

Agreement was reached that the primary cited reference did not teach searching an Interface Repository using an ORB protocol as conventionally defined by such terminology. Specific claim language to achieve this distinction was not agreed upon, although it was agreed that the primary reference did not conceptually teach or suggest such steps and elements.

Rejections under 35 U.S.C. §102(b)

In the Office Action, the examiner has rejected claims 1 - 39 under 35 U.S.C. §102(b) for lack of novelty as being anticipated by U.S. Patent Number 5,778,368 to Hogan. Examiner has equated Hogan's search methods and systems for general databases of executable and source code to our search method using an ORB protocol to search Interface Repositories of distributed, remotely callable procedures and methods, such as CORBA IR's.

In our claims, we are using the following definitions which are consistent with our disclosure as originally filed and are consistent with industry use of these terms:

ORB: In Common Object Request Broker Architecture (CORBA), an Object Request Broker (ORB) is the programming that acts as a "broker" between a client request for a service from a distributed object or component and the completion of that request. Having ORB support in a network means that a client program can request a service without having to understand where the server is in a distributed network or exactly what the interface to the server program looks like.

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Components can find out about each other and exchange interface information as they are running.

CORBA's ORB may be thought of as strategic middleware that is more sophisticated conceptually and in its capabilities than earlier middleware, including Remote Procedure Calls (RPCs), message-oriented middleware, database stored procedures, and peer-to-peer services.

An ORB uses the CORBA Interface Repository to find out how to locate and communicate with a requested component. When creating a component, a programmer uses either CORBA's Interface Definition Language (IDL) to declare its public interfaces or the compiler of the programming language translates the language statements into appropriate IDL statements. These statements are stored in the Interface Repository as metadata or definitions of how a component's interface works. (Source: *WhatIs.com*)

IDL: 1) IDL (interface definition language) is a generic term for a language that lets a program or object written in one language communicate with another program written in an unknown language. In distributed object technology, it's important that new objects be able to be sent to any platform environment and discover how to run in that environment. An Object Request Broker (ORB) is an example of a program that would use an interface definition language to "broker" communication between one object program and another one.... An interface definition language works by requiring that a program's interfaces be described in a stub or slight extension of the program that is compiled into it. The stubs in each program are used by a broker program to allow them to communicate. (Source: *Whatis.com*)

Interface Repository: (Page 4) ... Perhaps the secret to OMG's success is that it creates interface specifications, not code ... (Page 5) ... The CORBA Interface Repository contains the definitions of all of these interfaces. (Source: *Instant CORBA by Orfali, et*

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al., John Wiley & Sons, 1997)

From these definitions, the following facts apply to the interpretation of our claims:

- (i) an Interface Repository (IR) is not a general database of executable and/or source code, but is a repository of interfaces to remotely callable functions;
- (ii) an Object Request Broker protocol is not equivalent to a generalized database query language such as SQL, as an ORB protocol allows for real-time, collaborative computing among distributed program objects while a database query language only provides for access and download of programs; and
- (iii) Interface Description Language (IDL) is not executable code itself, but a description of an interface to the code which can be used to remotely call and use the code.

We have amended our claims to clearly and unambiguously claim an ORB protocol (not a database general query language), an Interface Repository (not a general repository of software code), and Interface Description Language (not actual code module download or copying). Thus, the cited reference does not properly anticipate our claims.

1. The cited reference, Hogan's patent, does not properly anticipate the claimed invention, as it fails to disclose all the claimed steps, elements or limitations. MPEP 2131 states:

TO ANTICIPATE A CLAIM, THE REFERENCE MUST TEACH
EVERY ELEMENT OF THE CLAIM (*capitalization emphasis found
in original text*)

Because the facts of the case as set forth below indicate that the cited reference does not properly teach all the steps, element or limitation of the claim, the

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rejection should be withdrawn:

- i. Hogan does not disclose searching or querying using an ORB protocol;
- ii. Hogan does not disclose searching an ORB Interface Repository; and
- iii. Hogan does not disclose displaying interfaces or IDS to available program objects .

2. The cited reference, Hogan's patent, does not properly anticipate the claimed invention, as it fails to disclose all the claimed steps, elements or limitations as set forth according to the applicant's terminology. Terminology and definitions of the cited reference(s) have been improperly employed to interpret the meaning and scope of the applicant's claims. MPEP 2173.01 states:

MPEP 2173.01 Claim Terminology. A fundamental principle contained in 35 U.S.C. 112, second paragraph is that applicants are their own lexicographers. They can define in the claims what they regard as their invention essentially in whatever terms they choose so long as the terms are not used in ways that are contrary to accepted meanings in the art.

Further, MPEP 608.01 states:

The claims should be construed in light of the specification.

The facts of the case set forth below indicate that the cited reference does not properly teach all the steps, element or limitation of the claim according to the terminology and definitions of the applicant's specification. Therefore, the rejection is unsupported by the cited art, and its withdrawal is requested.

- i. an ORB protocol is not equivalent to a general database query protocol;
- ii. Interface Definitions and ORB IDL is not equivalent to downloadable executable code or source code, and
- iii. an ORB Interface Repository is not equivalent to a repository of software executable code and/or software source code.

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It has been established that the rejections are not supported by the cited art, especially in view of the presented definitions and amendments to the claims. Reconsideration of all rejections is hereby requested.

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